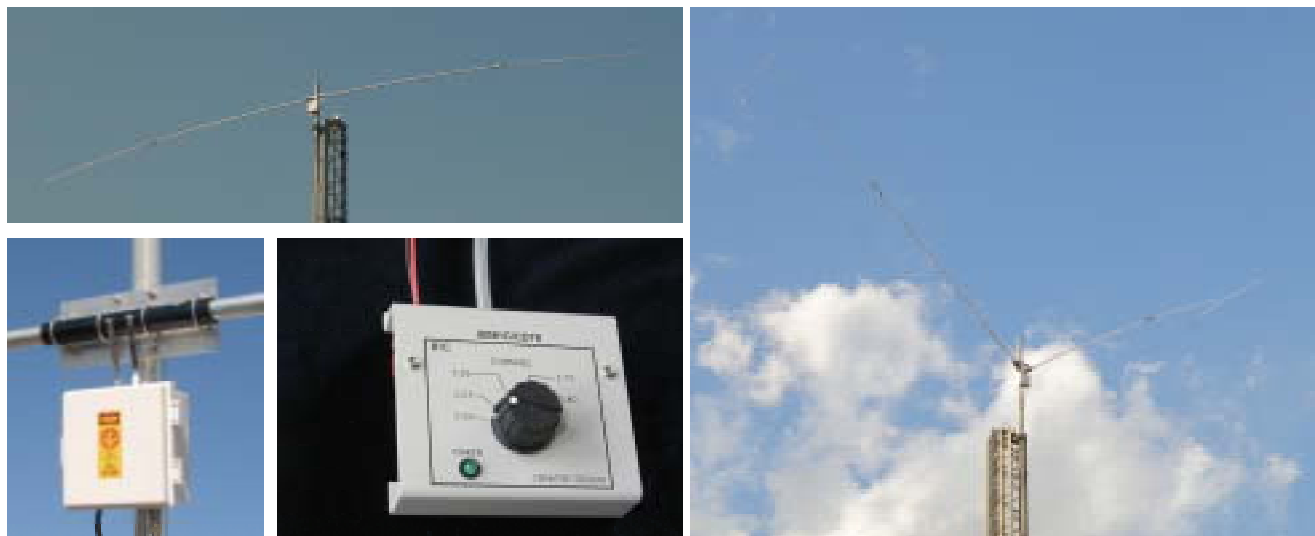


Dipole, Vertical Antennas



Rotatable Dipole Antenna

CD78 is a reduced scale rotatable dipole antenna for 3.5/3.8MHz. The element length of antenna approximately 45% reduced to the full size, so that delivering a radiation efficiency is come out out within -2dB of its full-sized counterpart. The remotely controlled BS81 (BS81 for CD78L) 2-band and preselectable 4-channel network built-in including balun transformer standard offers the operation selectable either 3.8MHz or 3.5MHz at the fingertip.

Vertical Antenna

CV48 is reduced type vertical antenna for 80, 75, 40 meter band. A loading capacitor hat makes it possible to efficiently by shortening the element on 7MHz. Only the unique structure of the trap in order to raise the Q by placing independently coil and capacitor of the 3.8MHz trap makes is possible to radiate RF energy most effectively. Optional remote controlled AD385 band adaptor enables to extend operation to 3.5MHz at the flip of switch.

Model	CD78Jr (-H)	CD78 (-5)	CD78L (-5)	CV48
Frequency (MHz)	3.5/3.8	3.5 / 3.8	3.5 / 3.8	3.8/7
No. of Element	—	—	—	—
Forward Gain (dBi)	-2.0	-1.5	-0.5	—
F / B Ratio (dB)	—	—	—	—
Power Capability (PEP/kW)	1.2(2)/2(2)	2 (5)	3 (5)	2
Boom Length (m)	—	—	—	—
Element Length (m)	11.9	17.0 (18.0)	24.0 (24.4)	12.1
Element Diameter (mm)	35	40	50	50
Rotational Radius (m)	6.0	8.5 (9.0)	12.0 (12.2)	—
Mast Diameter (mm)	48 ~ 61	48 ~ 61	48 ~ 61	48 ~ 61
Wind Surface Area (m ²)	0.4	0.7	1.0	0.3
Weight (kg)	8.0	12.0 (13.0)	22.0 (23.0)	11.0
Recommended Rotator	RC5-x	RC5-x	RC5A-x	—

- ★ All the models include balun standard, and connector attached is type -M-.
- ★ Wind survival rating of all the modes is above 35m/s.
- ★ Option: AD385 (3.5MHz Adapter for CV48)

HF V-Dipole

High Radiation Efficiency, Horizontal Polarization
Easy Construction, Compact, Insensitive to Ambient Condition



730V-1 (7/14/21/28MHz)

Model	730V-1 (730V-1A)	730V-2 (730V-2A)	830V-1 (830V-1A)
Frequency (MHz)	7/14/21/28 (HF+50)	7/21/28 (HF+50)	10/18/24 (HF+50)
Power Capability (PEP/kW)	1/2/2/2	0.6/2/2	3/3/3
Element Length (m)	11.6	8.6	10
Rotational Radius (m)	4.1/90°	3.0/90°	4.9/170°
Mast Diameter (mm)	42~61	42~61	42~61
Weight (kg)	5.5	4.5	5.0

- ★ All the models include balun that connector attached is type -M-. Power capability on 50 MHz is 1 kW input.
- ★ 50 MHz kit, 786C is optionally available (for upgrade for 730V-x, 830V-x)

Model 730V-x series is a compact V-type 4(3)-band dipole antenna with a figure 8-directivity pattern and is horizontally polarized. The shortest possible elements are used while still providing high radiation efficiency and broad band VSWR characteristics. The use of the V shape reduces the area needed for mounting the antenna and is insensitive to changes in height above the ground and surrounding metallic objects. These features allow the antenna to be installed at almost any site. The antenna is operable at a height of 2 - 3m or six or more feet above the ground. Due to the horizontal polarization and figure 8 pattern, the 730V-x is superior to the usual compact ground plane antenna, especially in respect to gain and TVI. A high quality balun is included as a standard component of this high performing antenna. Model 730V-xA is the model that 50MHz is added to the standard type of 730V-x. In the meanwhile model 830V-1 (830V-1A) is a V-dipole antenna for WARC band operation of the frequency 10/18/24/50 MHz) respectively.

730V-xW, V-Dipole Antenna for 7MHz Expanded Band

V-Dipole Antenna with BS41 Matching Tuner for 7MHz Expanded Band
Enable to Cover 200kHz Bandwidth on 7MHz for 730V-1W (while 150kHz for 730V-2W)
by Remotely Controlling 4-Band Switcher

730V-1W (7, 14, 21, 28MHz)

730V-1AW (7, 14, 21, 28, 50MHz)

Applicable bandwidth for the above models is 200kHz.

730V-2W (7, 21, 28MHz)

730V-2AW (7, 21, 28, 50MHz)

Applicable bandwidth for above models 150kHz.



BS41. It builds in matching circuit and balun transformer.

4-Band Remote Switch
(Supplied As An Assembly Kit)

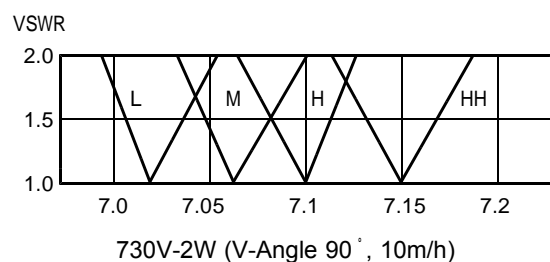
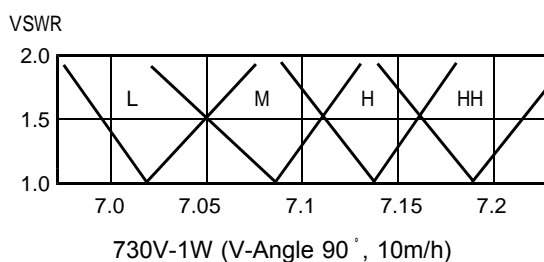
This model 730V-1W is a V-dipole enable to operate on recent newly assigned 7MHz expanded band. It covers approx. 200kHz on 7MHz of 730V-1W with maintaining as lower VSWR as 1.5:1, in the meanwhile 730V-2W covers however approx. 150kHz. (For the band switching, a 13.8VDC power supply and a remote cable of 4-conductors are required.)

Other than 7MHz, it contributes also to improve to maintain lower VSWR on other frequencies band that 730V-series allows. By conducting the band switching, it makes it possible to resonance the antenna tuning in more precisely, those higher frequencies in the ham band assigned for SSB, FM band etc.

Ex: At the best VSWR point on 14MHz of 730V-1W, operational frequency range expands from 14.15 up to 14.35MHz.
At the best VSWR point on 28MHz of 730V-2W, operational frequency range expands from 28.5 up to 29.0MHz.

As being the fact, taking the recent case in Japan, for example, the rules and regulations has been revised to be able to operate 7.060 ~7.140MHz for the PHONE (either AM or SSB) operation in All JA Contest as of 2010. In coupled with the band expansion, needing such an antenna 'ready-for-operation' will help a lot to meet the requests. The same is true of those applications and enthusiasts, seeking for wider bandwidth of operation in upper side of frequencies, for contest, DX-hunting, by determining to band selecting and switching the antenna swiftly into a preferable frequency desired, and quick contacting friends, rag-chewing with a favorite group or party avoiding an unwilling noise and QRM, hence the 730V-1W, 730V-2W will meet the requests.

VSWR for 7MHz (Typical)



- Those users who have already owned either 730V-1x or 730V-2x, the antenna tuner BS41 expanded kit for 7MHz band is only required. Except slight readjustment in tip element, no particular modification on the antenna itself is required as no electrical affection is given by attaching this unit.

BS41, Matching Tuner for 7MHz Expanded Band for 730V Series

This BS41 is a matching tuner designed for the existing 730V-series enable to operate the newly assigned expanded band on 7MHz. Attaching this unit to the model 730V-1x allows to expand the bandwidth on 7MHz for 200kHz bandwidth in keeping VSWR less than 1.5:1 while is approx. 150kHz for the model 730V-2x. A 13.8VDC power supply and 4-conductor cable for remote controlling are additionally required for band switching (customer furnished.)

Attaching this unit brings to helps the VSWR improvement for the other band other than 7MHz too. The VSWR characteristic for those higher bands (assigned for SSB, FM bands) tend to obtain a better VSWR.

Ex: 14MHz of 730V-1 enables to cover 14.15 ~ 14.35MHz bandwidth at the best VSWR point.

28MHz of 730V-2 enables to cover 28.5 ~ 29.0MHz bandwidth at the best VSWR point.

Not only those who owns the existing 730V-series for expanding it for 7MHz, but also those who wish to set up V-dipole seeking to operate on the newly assigned expanded frequencies on the 7MHz together, such as Contest lovers, DX-huntings, rag-chewing with friends, meeting QSO group or party on the air, this antenna meets the demands and is indispensable.

For the details for the BS41, refer to the page for 730V-xW.